



Gulf of Mexico Harmful Algal Bloom Bulletin

14 March 2005

National Ocean Service

National Environmental Satellite, Data, and Information Service

Last bulletin: March 8, 2005

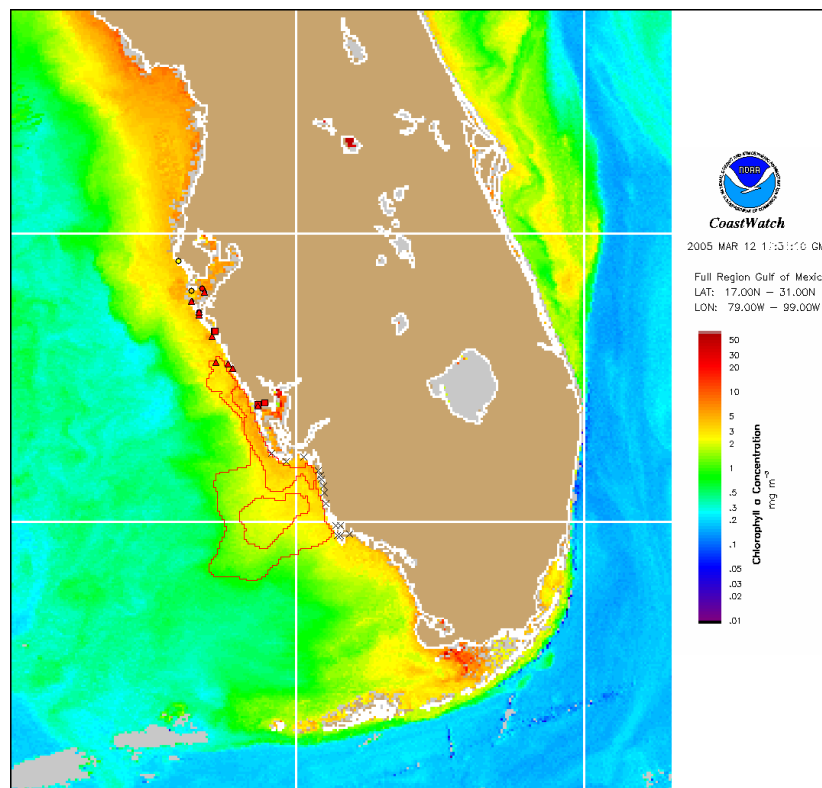
Conditions: A harmful algal bloom has been identified from Manatee to northern Collier counties. Impacts on shore are expected to be patchy moderate to high from Manatee to Lee Counties, and low in northern Collier County through Wednesday. Impacts will be patchy high Wednesday and Thursday from Manatee to Lee county, and low to moderate in northern Collier County. Impacts can be expected to increase in the afternoon.

Analysis: The bloom located from Manatee to Collier County has continued to move south. It currently extends from 27°33'N at the mouth of Tampa Bay to approximately 25°49'N near Cape Romano, with its furthest southwest extent at 25°46'N 82°22'W, west of Cape Romano. Chlorophyll concentrations are highest along the coast from Tampa Bay to Naples at approximately 5-8 $\mu\text{g/L}$. Lee county samples from last week indicated the presence of diatoms at the southern extent. Nearly 30 dead manatees have been reported since last week between Manatee and Lee counties, although red tide has not been confirmed as the cause of death. Dead fish and respiratory irritation have been reported mainly between Venice and Captiva Island. Prevailing southerlies this week will slow the southern transport of the bloom and promote continued effects on shore. Westerlies later in the week will continue to bring the bloom onshore at Collier County.

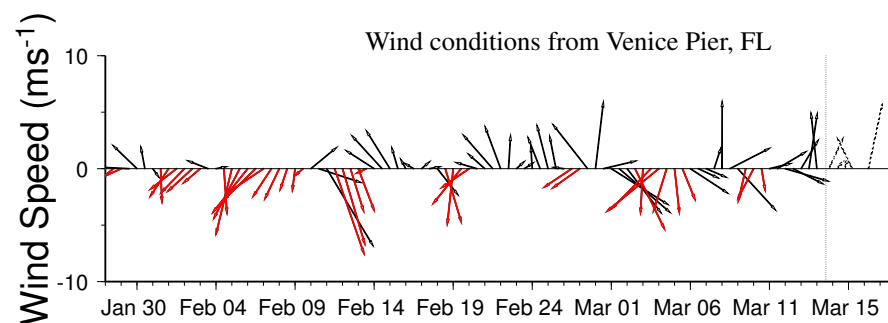
-Stolz and Fenstermacher

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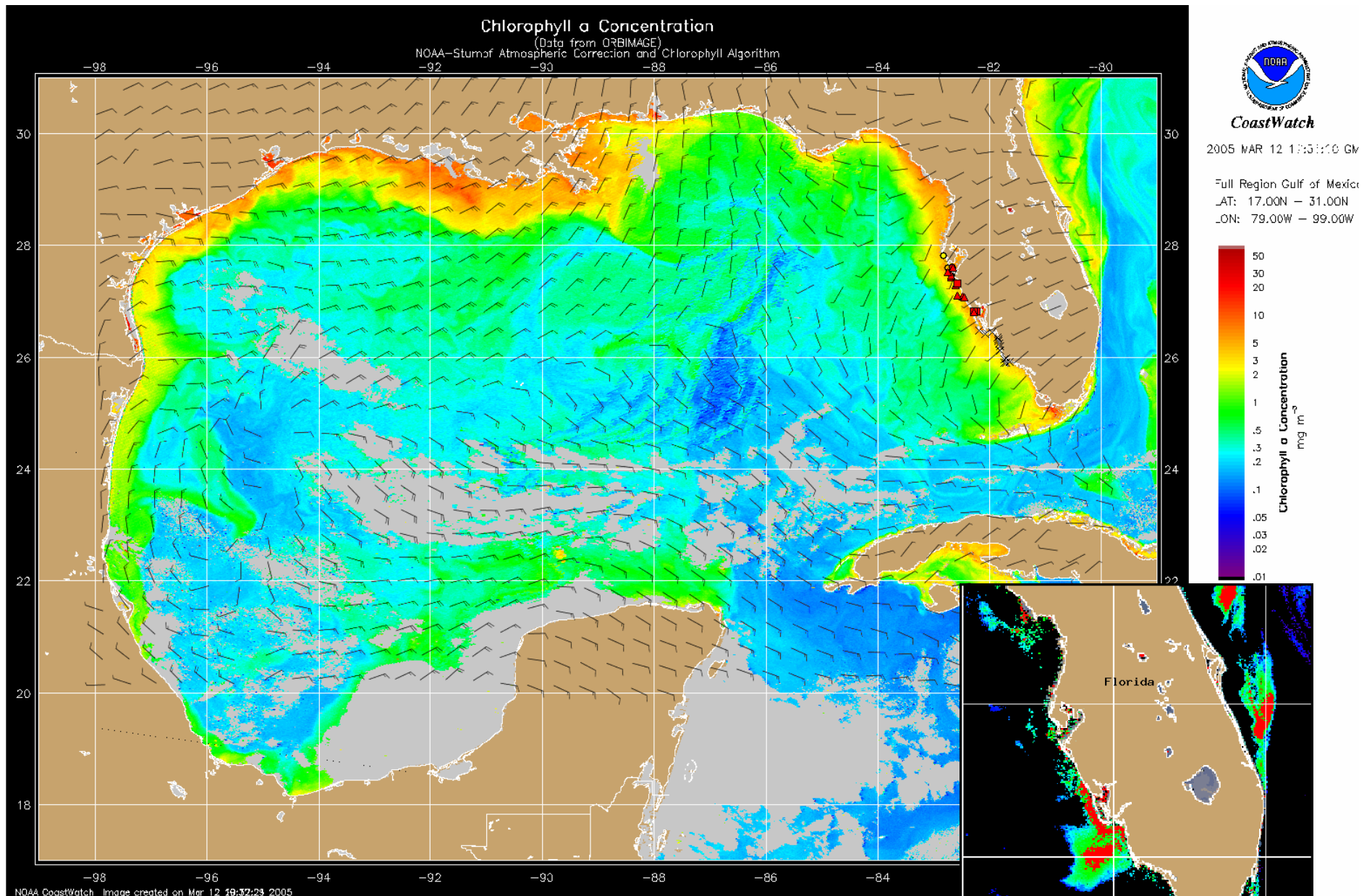


Chlorophyll concentration from satellite with possible HAB areas shown by red polygon(s). Cell concentration sampling data from March 4, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

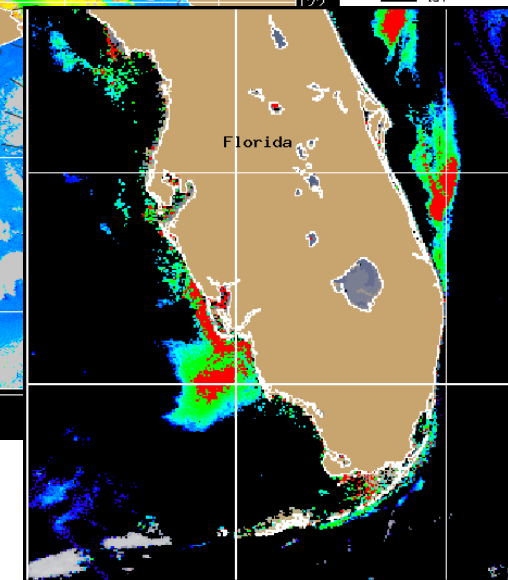


Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

Southerly winds today about 10 knots (5 m/s) becoming southwest tonight and variable to southeast tomorrow with some afternoon seabreeze. Winds increasing to 20 knot (10 m/s) southerlies Wednesday, to westerlies at about 10 knots (5 m/s) on Thursday.



Chlorophyll concentration from satellite and forecast winds for March 15, 2005 06Z with cell concentration sampling data from March 4, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Blooms shown in red (see p. 1 analysis and image for interpretation)